WHAT IS CLAIMED IS:

1. An internal combustion engine comprising an engine body, a movable member movable relative to the engine body, the engine body and the movable member together defining a combustion chamber, the engine body defining intake and exhaust ports communicating with the combustion chamber, an air induction system communicating with the combustion chamber through the intake port, an exhaust system communicating with the combustion chamber through the exhaust port, an intake valve configured to move between an open position and a closed position of the intake port, an exhaust valve configured to move between an open position and a closed position of the exhaust port, a valve actuator configured to actuate either the intake valve or the exhaust valve, a change mechanism configured to change an actuating timing of the valve actuator at which the valve actuator actuates the intake valve or the exhaust valve, a control device configured to control the change mechanism and at least a first sensor configured to sense an operational condition of the engine and to send a first signal to the control device, the control device being configured to determine if the engine is in a cruising mode based, at least in part, on the first signal and to control the change mechanism to advance or retard the timing of the valve actuator to reduce engine speed fluctuations when the engine is in a cruising mode.

2. The engine as set forth in Claim 1, wherein the air induction system includes a throttle valve arranged to regulate an amount of air.

3. The engine as set forth in Claim 2, comprising a second sensor configured to generate a second signal if the throttle valve is in operation and the control device is configured to determine if the engine is in a cruising mode only if the second sensor indicates that the throttle valve is not in operation.

4. The engine as set forth in Claim 1, comprising an output shaft coupled with the moveable member for rotation with the moveable member, the first sensor being configured to sense an angular position of the output shaft and to send an angular position signal to the control device, the control device being configured to calculate a rotational speed of the output shaft based upon the angular position signal, the rotational speed comprising a second signal.

5. The engine as set forth in Claim 4, wherein the control device is configured to determine if the engine is in a cruising mode based at least in part by said second signal.

6. The engine as set forth in Claim 5, wherein the determination of if the engine is in a cruising mode is based at least in part upon an average engine speed over a period of time.

7. The engine as set forth in Claim 1, wherein, to reduce engine speed fluctuations, the control device is configured to control the change mechanism to advance or delay the closing of the intake valve.

8. The engine as set forth in Claim 1, additionally comprising a crankshaft journaled for rotation at least partially within the engine body, wherein the valve actuator includes a camshaft journaled on the engine body for rotation, the camshaft defining a cam lobe configured to actuate the intake or exhaust valve, the change mechanism being configured to change an angular position of the camshaft relative to the crankshaft.

9. A method for controlling an internal combustion engine including intake and exhaust valves, a valve actuator configured to actuate the intake and exhaust valves, and a change mechanism configured to change an actuating timing of the valve actuator at which the valve actuator actuates at least one of the intake valve and the exhaust valve, the method comprising sensing an operational condition of the engine, determining whether the engine is operating in a cruising state, determining an engine speed of the engine, determining if the engine speed is fluctuating beyond a predetermined value, and adjusting the actuating timing of the valve actuator to reduce the engine speed fluctuations.

10. The method as set forth in Claim 9, further comprising determining if a throttle valve is being operated.

11. The method as set forth in Claim 10, wherein if the throttle valve is being operated it is determined that the engine is not in a cruising state.

12. The method as set forth in Claim 9, wherein determining whether the engine is operating in a cruising state comprises determining if the engine speed is in a steady state.

13. The method as set forth in Claim 12, wherein determining if the engine speed is in a steady state comprises calculating an average engine speed over a specific time period.

14. The method as set forth in Claim 9, wherein adjusting the actuating timing of the valve actuator comprises delaying or advancing the closing of the intake valves.

15. The method as set forth in Claim 9, wherein adjusting the actuating timing of the valve actuator comprises changing an angular position of a camshaft relative to a crankshaft.

16. An internal combustion engine comprising an engine body, a combustion chamber having at least one valve seat, a valve configured to move between an open position and a closed position of the valve seat, a valve actuator configured to actuate the valve, a variable valve timing mechanism configured to change an actuating timing of the valve actuator at which the valve actuator actuates the valve, and means for reducing fluctuations in a speed of the engine while the engine is in a cruising mode by adjusting the actuating timing of the valve actuator.

17. The engine as set forth in Claim 16, additionally comprising a crankshaft journaled for rotation at least partially within the engine body, wherein the valve actuator includes a camshaft journaled on the engine body for rotation, the camshaft defining a cam lobe configured to actuate the intake or exhaust valve, the change mechanism being configured to change an angular position of the camshaft relative to the crankshaft.